

REMARKS

Claims 28-36 are all the claims pending in the application. According to the Advisory Action mailed April 5, 2005, the Amendment under 37 C.F.R. § 1.116 filed on March 25, 2005 was entered. Applicants further amend claims 28 and 34 and submit the following remarks.

Statement of Substance of Interview

On May 2, 2005, Examiner Jennifer Dolan and the undersigned discussed the rejections of record during a telephone conference. Applicant thanks the Examiner for the courtesies extended during this telephone conference.

Claim Rejections Under 35 U.S.C. § 102

Claims 28, 29, 32 and 33 are rejected under 35 U.S.C. § 102(b) as being anticipated by Dragone et al. (5,926,586).

Claims 28, 29, 32, and 33

As an initial matter, Applicant has amended independent claim 28 to recite that the method includes arranging the plurality of elements in two or more lines on the wafer; and separating the lines with straight cutting paths. An *exemplary* embodiment of this relationship is shown in the original specification at Fig. 6, where a plurality of elements are arranged in two or more lines (Line A and line B) on one wafer. These lines A and B are shown in *modified* Fig. 6, below. In this *exemplary* embodiment, an optical characteristic test can be conducted with respect to each arrayed waveguide grating 102 prior to cutting along the curved cutting paths 103B. Accordingly, chips with good optical characteristic can be cut out along the curved cutting paths 103B, while the chips with without good optical characteristics are not cut out.

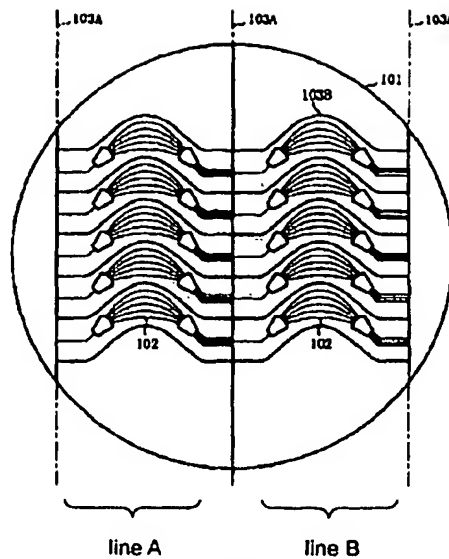


FIG. 6

With respect to independent claim 28, Applicant respectfully requests that the Examiner withdraw this rejection at least because Dragone does not teach all of the claims' recitations. For example, Dragone does not teach the claimed method including arranging the plurality of elements in two or more lines on the wafer, and separating the lines with straight cutting paths.

For example, Dragone merely disclose that the elements are arranged in *one line* on one wafer, as shown in Fig. 5. Therefore, the number of possible chips arranged on one wafer according to the present invention can be increased in comparison to the number of the chips arranged by Dragone.

Accordingly, Applicant respectfully submits that independent claim 28 is patentable. In addition, Applicant respectfully submits that dependent claims 29, 32, and 33 are patentable at least because of their dependency from claim 28.

Claim Rejections Under 35 U.S.C. §103

Claims 30 and 31

Claims 30 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dragone et al. (5,926,586) in view of Distefano et al. (5,776,796).

Applicant respectfully submits that dependent claims 30 and 31 at least because of their dependency from claim 28 and because Distefano, which was cited by the Examiner as showing a ultrasonic vibration or hydraulic pressure for cutting chips, does not cure the deficiencies in Dragone discussed above.

Claim 34 and 35

Claims 34 and 35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dragone et al. (5,926,586) in view of Reinker (5,745,631).

Applicant has also amended independent claim 34 to recite that the method includes arranging the plurality of elements in two or more lines on the wafer; and separating the lines with straight cutting paths. Applicant respectfully requests that the Examiner withdraw the rejection of amended, independent claim 34 at least because the combination of Dragone and Reinker does not teach all of the claims' recitations. As discussed above with respect to independent claim 28, Dragone does not teach the claimed method including arranging the plurality of elements in two or more lines on the wafer, and separating the lines with straight cutting paths. Moreover, Reinker, which was cited by the Examiner as showing an optical multiplexer by stacking chips and flowing adhesive, does not cure the deficiencies in Dragone discussed above.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)
U.S. Appln. No. 10/648,276

Applicant respectfully submits that dependent claim 35 is patentable at least because of its dependency from claim 34.

Claim 36

Claim 36 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Dragone et al. (5,926,586) in view of Reinker (5,745,631) and further in view of Forbes et al. (6,379,909).

Applicant respectfully requests that the Examiner withdraw the rejection of dependent claim 36 at least because of its dependency from claim 34 and because Forbes, which was cited by the Examiner as showing a stacked chip structure in which chips can be cut from the same wafer or different wafers, does not cure the deficiencies in Dragone discussed above.

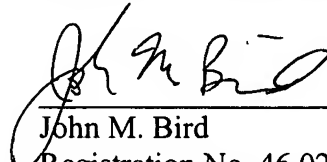
Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)
U.S. Appln. No. 10/648,276

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



John M. Bird
Registration No. 46,027

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: June 6, 2005

Attorney Docket No.: Q76956